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(71) Applicant (for all designated States except US):
CARTWRIGHT CONSULTING, CO. [US/US]; 8324
16th Avenue South, Minneapolis, MN 55425-1742 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **CARTWRIGHT, Peter, S.** [US/US]; 8324 16th Avenue South, Bloomington,
MN 55425-1742 (US).

(74) Agent: **STEMPKOVSKI, Richard, C., Jr.**; Nawrocki,
Rooney & Sivertson, P.A., Suite 401, Broadway Place East,
3433 Broadway Street Northeast, Minneapolis, MN 55413
(US).

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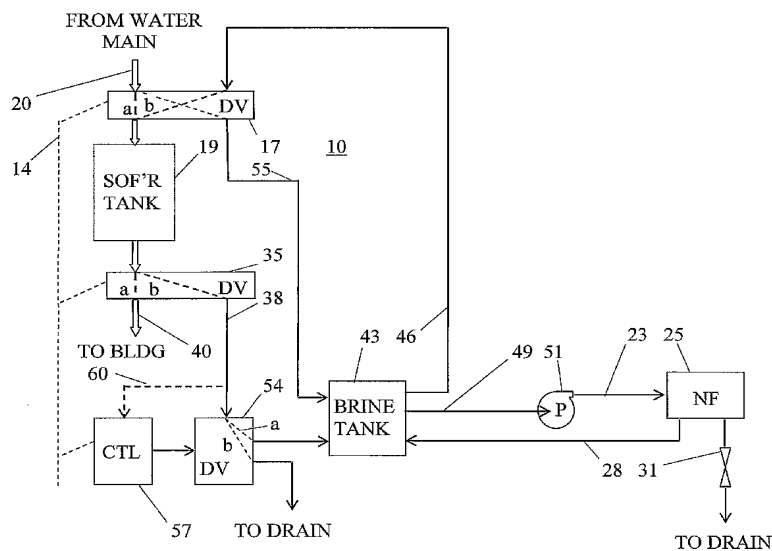
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— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,

[Continued on next page]

(54) Title: BRINE-CONSERVING NANOFILTRATION WATER SOFTENER SYSTEM



(57) Abstract: A brine recycling process forms a part of a water softening system. The water softening system has a brine tank (43) for receiving brine solution that has passed through the softening tank (19) of the system, preferably using pump (5), to remove hardness ions adsorbed on the resin regenerating tank (19). The brine solution is forced from tank (43) through a nanofilter (25) that selectively passes brine ions and not hardness ions. The liquid passed through nanofilter (25) is returned to the brine tank (23), with other liquid being directed to drain.

WO 2005/075061 A1



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